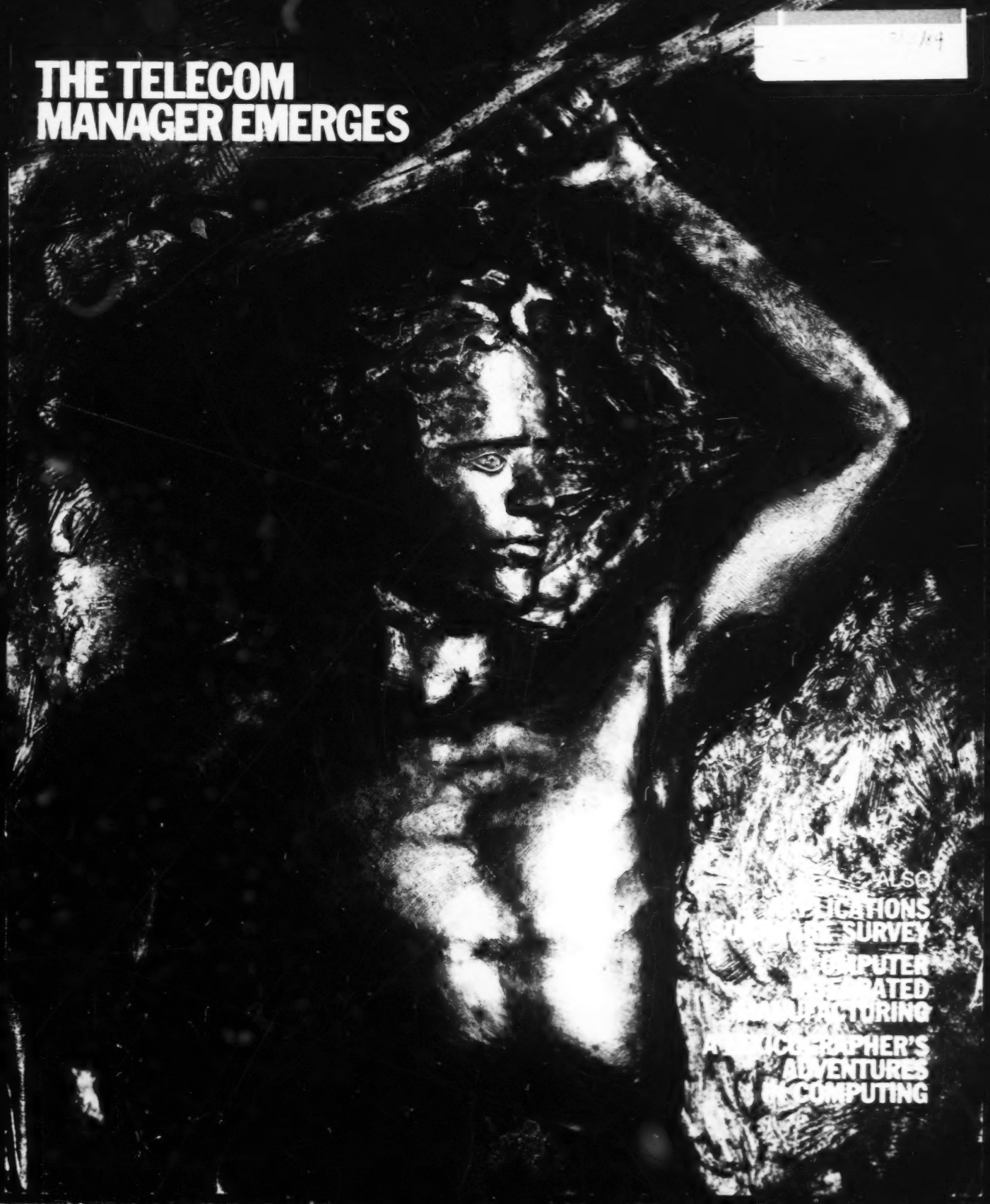
DATAMATION 84

INTERNATIONAL OEM EDITION MARCH 4.00 U.S.A

THE TELECOM MANAGER EMERGES



ALSO

ICATIONS

SURVEY

PUTER

ATED

TORING

PHER'S

ADVENTURES

COMPUTING

DATAMATION®

MARCH 1984/$4.00 U.S.A.
VOLUME 30 NUMBER 3
This issue, 186,475 copies

FEATURES

32
IN FOCUS
The ATM is leading the way toward the self-service society. Robert Garrson reports in "Easy Money."

120
TELECOM MANAGEMENT: AN EMERGING ART
Robert M. Dickinson
How the handling of telecommunications facilities can be tied to business strategies.

134
I, COMPUTER, TAKE THEE, PBX
William Ambrose and Diane Flood
Vendors are proposing to get a piece of the huge aftermarket the marriage of voice and data will generate.

147
IS IT THE PBX OR IS IT THE LAN?
Philip H. Reagan
The major networking technologies are clearly different, but which is more promising is not clear.

152
YOUR POCKET PROTOCOL PRIMER
Eric D. Siegel
A guide to the jargon of communications standards as easy as Dick and Jane.

158
THE OLD SCHOOL SELL
Willie Schatz
Educational market leader Apple and its rivals are crying, "Get 'em while they're young!"

169
COMPUTER INTEGRATED MANUFACTURING
Eric Teicholz
Optimizing production flow and scheduling, this concept combines manufacturing, design, and business functions.

179
LABOR RELATIONS IN THE AGE OF ROBOTICS
Charles Bruno
As factory automation improves efficiency, management and labor disagree on what it will do to employment.

185
A LEXICOGRAPHER'S ADVENTURES IN COMPUTING
Laurence Urdang
How an academic wrested an application from the jaws of early wp monsters.

198
APPLICATIONS SOFTWARE SURVEY
Of 3,000 users who rated 82 packages, 73% reported satisfaction with their purchases. More in this Data Decisions survey.

NEWS IN PERSPECTIVE

44 **SELLING ABROAD**
Export laws on the line.

52 **THE WORKPLACE**
Is Big Blue Big Brother?

61 **MICROCOMPUTERS**
IBM to go portable.
IBM fix AT&T in Unix mix.
Selling software to go.

84 **DATABASE MANAGEMENT**
RDBMS: is now the time?

93 **WASHINGTON**
Hi-tech tax policies.

96 **COMPUTING SERVICES**
CSC: a hectic 25 years.

104 **FOREIGN VENTURES**
Two for the road.

116 **BENCHMARKS**

DEPARTMENTS

8 **LOOKING BACK**
13 **LOOK AHEAD**
18 **CALENDAR**
23 **LETTERS**
29 **EDITORIAL**
225 **PEOPLE**
229 **HARDWARE**
239 **SOFTWARE & SERVICES**
249 **SOURCE DATA**
256 **ADVERTISERS' INDEX**
264 **ON THE JOB**
268 **MARKETPLACE**
272 **READERS' FORUM**

INTERNATIONAL 224-1

- 3 **FROM HERE TO THERE**
-11 **THE SOFTWARE/SERVICES SCENE**

OEM SUPPLEMENT 225-1

- 3 **THE NEW ORIENT EXPRESS**
- 9 **THE OUTLOOK FOR INTEGRATED SOFTWARE**

COVER SCULPTURE BY GERALD SICILIANO
PHOTOGRAPH BY ROBERTO BROSAN

Three thousand users react to the pluses and minuses of 82 packages.

APPLICATIONS SOFTWARE SURVEY

by Data Decisions

Is it easier to produce a good software product than to support one? Probably not, but for some reason applications software vendors are doing a better job providing users with the packages they need than with the backup they want, according to 3,376 users responding to a survey asking them to rate 82 mainframe and minicomputer software packages from 45 vendors. Although 73% of the users gave the packages an overall satisfaction rating of 6 or higher, on an ascending scale of 1 to 10, only 60% gave their vendors' service efforts equally high marks.

Why is this? The difference probably stems from two basic facts of computer software life: not every bug can be found, let alone fixed, before the package is first released, and, understanding how to use a package and conveying this information to others are two different things.

These factors are of special importance for this study, since applications packages are frequently used by nontechnical end users who may need more support than dp professionals. Indeed, a full 51% of those returning the questionnaires were end users, and most of this group did not depend on the dp department for access to the system.

The survey probed user impressions on package performance, vendor support, and value. To determine the dp environment, users identified the hardware and length of time the software package had been operating and provided a detailed profile of how they decided which packages to buy (see Methodology, p. 206).

For the sake of convenience, the 82 packages were divided into seven broad group headings: 21 general accounting packages, nine payroll packages, 15 general business packages, 20 banking and financial packages, four insurance packages, seven manufacturing packages, and six project management packages. Deciding where a particular software product belonged was of necessity somewhat arbitrary; indeed, the general business category is a catchall for a variety of forecasting models, graphics packages, and other types of decision support applications. The main function of the group averages included in the report is to show how one type of product compares to another—it would not necessarily be valid to make direct product-to-product comparisons.

The specific ratings show users indicated that the average applications software package performed okay, but not spectacularly. On a scale of 1 to 10, with the highest

PHOTOGRAPHS BY STEVE COOPER

Whether you're buying a car, a tomato, or a sofa, a customer always wants the best value.

number for a perfect performance, the average package scored a 6.6. Users rated performance from several viewpoints: efficiency of hardware utilization, level of program errors, and the amount of time for initial installation. (A graphic representation of the ratings of 80 packages follow—two were deleted because of space limitations.)

Of the seven package categories, general business programs commanded the highest performance ratings, averaging 6.7, followed by general accounting packages, with a 6.4. The more complex types of applications programs, such as manufacturing packages, project management, and payroll/personnel, had lower average scores. Indeed, the payroll/personnel group scored a significant one point below the norm, or 5.7.

LOWER SUPPORT RATINGS

Since few if any users have consistently good things to say about the vendor support of software, perhaps it comes as no surprise that vendor support ratings were lower than the ratings for the packages themselves. Support ratings are a composite of user votes on three categories: responsiveness, training, documentation.

General accounting packages scored the highest level of any in terms of vendor support, 6.3, probably because these programs are older and more likely to have perfected training and documentation. Interestingly, two fields that have long experience with applications software, banking and insurance, indicated many problems with vendor support—the rating was 5.8 for each. General business programs received a 6.2 rating for support, and project management packages tallied a 6.1.

Little discernible difference in operational characteristics were noted by the users. Asked to rate the ability of programs to handle expanded processing volumes, recovery/backup capabilities, and security provisions, users gave the group a 6.4 score, with a narrow range depending on type of application—6.7 for general accounting packages to 6.2 for banking, general business, and manufacturing.

Ever wonder if other applications software packages had easier data entry? The bad news may be that few users think their packages are ideal. The average input/output rating—indicating level of satisfaction with data entry, output procedures, and ease of format change—was 6.1, with a narrow range from the established general accounting programs at 6.3 to the 5.7 for payroll.

Whether he is buying a car, a tomato, or a sofa, a customer always wants to get the best value for his dollar. Respondents rating their applications software indicated that their packages were a good value in most cases; about a third considered them an excellent value, and only 4% of them a poor value. Value, in this survey as well as in real life, was defined as features and capabilities relative to cost.

An excellent value has two meanings, of course: most of the "excellent" ratings went to products with outstanding features at a price comparable to or lower than the competition, while about a third of the excellent ratings were voted because the packages provided good features and capabilities at a price substantially lower than the competition. In rating products considered good values, 40% of the users felt that if the product had good features at a price comparable to competitive packages, it was good.

A product that had outstanding features but was higher priced was rated good by 13% of the users. A few users, 4%, considered a product good if it didn't have many features but was cheap.

No one should ever accuse software salesmen of the tactics closely associated with used-car salesmen. Nine out of 10 users said that the package did what the vendor said it could, and eight out of 10 said their packages met or exceeded vendor promises regarding speed, performance, and efficiency. Overall, two thirds of the users said that the package met the vendor's promises.

The older and less complex applications more frequently met or exceeded vendor claims. Three quarters of the general business programs delivered what the salesmen said they would, but insurance packages and payroll and project management packages in general were only a 50-50 gamble. Two thirds of the banking package users felt that the packages and vendors delivered, along with 61% of the users of the manufacturing packages and 72% of the users of general accounting packages.

Users were also asked which of four types of vendor support services they used and how they rated those services on a 10 point scale. The services investigated were on-site, telephone hot line, on-line, and mail. Nearly nine out of 10 users (88%) reported using the vendor's telephone hot line support service; 62% used their vendor's on-site support and mail support service; and almost two in 10 used an on-line support service.

SUPPORT SERVICE RATINGS

Support services ratings are reported only for packages that met a minimum reporting standard of 10 respondents. The average score for the 73 packages that met the standard for on-site support services was 6.6. These scores show little variation from group to group.

The average score for the 81 packages with telephone hot line support services was 6.2, with average scores ranging from a low of 5.8 for the payroll/personnel group to a high of 6.5 for the manufacturing, project/industrial management, and business/office administration groups.

The average score for the 17 packages that met the standard for on-line support services was 6.0. The average scores for packages in the seven groups range from a low of 5.5 for the business/office administration group to a high of 6.6 for the insurance group. Too few packages met the reporting standard to permit group averages to be calculated for the payroll/personnel, project/industrial management, and banking/financial groups.

The average score for the 72 packages that met the standard for mail support services was 5.7. The average scores for packages in the seven groups ranged from a low of 5.5 for the banking/financial and insurance groups to a high of 6.1 for the business/office administration group.

Users were asked to provide an overall rating for services based on the quality, speed, and usefulness of the vendor's response to product enhancement requests and the accessibility of support facilities; to the quality and currency of user documentation updates; and on the availability and quality of training.

The average package studied received an overall vendor/vendor-supplied services rating of superior from 11% of its users, a very good rating from 48%, an acceptable rating from 33%, and an inadequate rating from 6%. On the 10 point scale, the mean score was 6. Of the seven package groups, the average general accounting package received the highest overall vendor/vendor-supplied sevices score, 6.2, and the lowest score, 5.8, was shared by the average insurance and project/industrial management package.

Only 14% of the users of the average package report that they have evaluated alternative packages since their package was acquired. Of this group, 3% evaluated alternative packages offered by their computer vendor, and 11% evaluated alternatives from independent vendors.

Of the seven groups, users of the average business/office administration package were most likely to have evaluated alternative packages (24%), and users of the average general accounting package were least likely to have done so (only 7%).

Between these poles were insurance packages (21%), project/industrial management packages (17%), manufacturing packages (14%), payroll/personnel packages (13%), and banking/financial packages (11%).

Only one in seven users (14%) of the typical applications package reported that they

No one should ever accuse software salesmen of used-car dealer tactics.

are actively considering replacing it. There are relatively small differences among the package groups, which range from 20% for project/industrial management packages to 9% for payroll/personnel packages.

Users who were thinking of replacing their packages were most likely doing so because they needed features that were not available in their current package (34%) or because they were upgrading or changing to an incompatible system (21%). Twelve percent of those thinking of replacing their packages were doing so because of slow execution speed, and 11% claimed that the upgrade/expansion capabilities offered for the current package were too expensive. A final 11% claimed their packages were just generally unsatisfactory.

To clarify how they made their purchasing decisions in the first place, users were asked to evaluate the influence of eight factors on their acquisition decisions. Specific features and capabilities emerged as the primary influence. Eighty-one percent of the users of the average packages studied—including at least 76% of the users in each of the seven package groups—said this factor had a major influence.

Productivity/ease of use ran a distant second (54%). Overall vendor presence or reputation in the industry, compatibility with existing software, and cost and/or time required to implement the package internally were each cited as major factors by more than three out of 10 users.

In contrast, uniqueness of the application was considered a major influence by only 26%, experience with other packages from the same vendor was a major influence for only 18%, and a consultant or third-party recommendation was considered a major influence by only 14%.

OTHER PACKAGES EVALUATED

About three quarters of the respondents said that alternative packages were evaluated before they decided to acquire their package. Twenty percent evaluated an average of 1.5 alternatives available from their computer vendor, and 66% evaluated an average of 3.7 alternatives offered by independent vendors.

Among the seven groups, users of the average manufacturing package most likely evaluated an alternative package (86% did so), both from independent vendors (86%) and from their computer vendor (48%). Although users of the average business/office administration package are least likely to have evaluated alternative packages, the majority (63%) still did so.

As for the operating environment, the average package included in the survey had been installed for 37 months, with the banking/financial group package installed for the longest time, 45 months, and the manufacturing group for the shortest, 28 months.

Sixty-one percent of the surveyed users indicated that to the best of their knowledge, they were using their package's latest version or release; one third indicated that a more current version had been released but was not being used; and 7% did not know which release they were using.

Package currency among the seven groups varied widely from a low of 47% for the average manufacturing package to a high of 72% for the average project/industrial management package. The latest versions were being used for 67% of the payroll/personnel packages, 64% of the insurance packages, 63% of the general business packages, 60% of the banking/financial packages, and 58% of the general accounting packages.

Two thirds of the packages studied run primarily on IBM computers. Only 6% run on the second most popular host, Digital Equipment. Following those two are Hewlett-Packard, 4%; Burroughs, 3%; and Wang, Amdahl, Honeywell, and Sperry, each with 2% of the packages. Texas Instruments, Itel, Data General, and Magnuson each host 1%, and computers from other unspecified vendors host the remaining 10%.

A breakdown of host vs. package-type figures shows that 70% to 80% of the general accounting, banking/financial, project/industrial management, and payroll/personnel groups run on IBM hosts. Conversely, only 50% of the general business packages, 44% of the insurance packages, and 31% of the manufacturing packages do so. In the manufacturing category, 33% run on Hewlett-Packard, 17% run on DEC, and 7% run on Data General systems.

The following bar charts summarize users' overall ratings of the 82 packages included in this survey. With each chart is the number of user responses, the percentage of users who judged their package and vendor support outstanding (giving overall ratings of 9 or 10 in each category), the percentage of users seeking to replace the package, and the percentage of this group citing unsatisfactory performance as the reason.

Despite the scope of this year's survey, like any survey it concentrates on a limited universe. Many excellent products were excluded because of our statistical criteria. Unfortunately, no survey can set absolute standards for evaluating a software package that would be relevant to a particular installation and end user. But it can give a starting point for discussions among dp managers, software suppliers, and the end users.

Ratings Summaries

GENERAL ACCOUNTING PACKAGES—21 packages studied.

7.9—Disk Account Reconciliation
7.7– Timberline Systems MAC
7.5—Insight Software INSIGHT
7.4—Data Design Fixed Asset Accounting
7.3—Data Design Accounts Payable/Purchasing Control
7.2—Westinghouse IAI Financial Accounting; MSA General Ledger
7.0—MSA Fixed Assets
6.9—UCC Fortex CARMS; MSA Accounts Receivable; MSA Accounts Payable; ISA Accounting and Budget System
6.8—**Group Average;** McCormack & Dodge General Ledger Plus
6.6—ISA Cash Disbursement System
6.5—McCormack & Dodge Fixed Assets Plus
6.3—McCormack & Dodge Accounts Payable Plus; UCC Financial Control System
6.2—Software International Accounts Receivable; ISA Accounts Payable
6.1—Software International Accounts Payable
5.3—ISA General Ledger

PAYROLL/PERSONNEL PACKAGES—9 packages studied.

7.4—Integral Systems Payroll/Personnel
7.3—MSA Payroll Accounting System
7.1—MSA Personnel Management & Reporting System
7.0—MSA Human Resources System
6.4—**Group Average**
5.8—Cyborg Systems Payroll/Personnel
5.7—Westinghouse Payroll/Personnel
5.3—McCormack & Dodge Human Resources Plus; Information Sciences Human Resources System

GENERAL BUSINESS PACKAGES—15 packages studied.

8.0—MSA ALLTAX
7.8—Execucom IFPS
7.4—SPSS Batch System; List Processing Carrier Route Coding
7.3—Computer Associates CA-Autotab; ISSCO Tel-A-Graf
7.1—Aim Plus Aims Plus; ADR Empire
7.0—ISSCO Dissplа; ISA Foresight
6.9—**Group Average**; ADR ETC
6.8—American Software Sales Forecasting
6.6—Xerox Business Management System
5.6—Interactive Management Financial Management System
5.5—MSA Forecasting and Modeling System

BANKING & FINANCIAL PACKAGES—20 packages studied.

7.8—UCC Super MICR
7.7—Bob White On-line Banking System
7.5—Stockholder Systems PEP
7.3—Weiland Software Demand/Deposit Credit Reserve
7.2—Stockholder Systems Corporate Shareholder System

7.1—Hogan Systems, The Umbrella System
6.9—Florida Software Direct Deposit Accounting
6.8—Remote Computing Savings and Loan System
6.7—UCC Customer Information System
6.6—**Group Average**; Florida Software Commercial Loan System
6.5—Florida Software Certificate of Deposit
6.4—Hogan Systems Integrated Deposits System; Citizens Automated Canton System/1990
6.3—Hogan Systems Prophet; Dyatron Pro-Trust
6.2—UCC Paperless Item Processing; Florida Software Mortgage Loan System
6.1—UCC Commercial Loan System
5.5—UCC Installment Loan System
4.9—Florida Software Financial Management System

INSURANCE PACKAGES—
4 packages studied.
7.1—Logic Inc. Credit Life Administration
6.6—Insurenet Inc. Insurenet
6.5—**Group Average**
6.4—Pallm Inc. Pallm System
6.0—Informatics General Life-Comm

MANUFACTURING PACKAGES—
7 packages studied.
7.3—Ask MANMAN
7.1—Comserv AMAPS
6.8—NCA Maxcim
6.7—Cincom MRPS
6.6—**Group Average**
6.5—MSA ARISTA Manufacturing System
5.8—Martin-Marietta MAS Manufacturing Control System
5.7—Automated Quill Mini-Miz/PAIS

PROJECT & INDUSTRIAL MANAGEMENT PACKAGES—
6 packages studied.
7.3—Thomas Laguban Associates E-PICS
6.9—Boeing Executive/Information Services
6.8—AGS Management PAC Systems
6.3—**Group Average**
6.1—AGS Management SDM/70
5.4—AGS Management Project Control/70
5.4—MSA Inventory & Purchasing System

REPORT AVAILABLE

This survey is based on a forthcoming report in *Software*, a monthly updated information service available by subscription that covers systems and applications software for mainframes, minicomputers, and micros. Additional information is available from Data Decisions, 20 Brace Rd., Cherry Hill, NJ 08034. The telephone number is (609) 429-7100.

AV. TOLERANCES FOR 68% CONFIDENCE LEVEL

	OVERALL SATISFACTION			SPECIFIC ATTRIBUTE RATINGS			
Sample Size	6.0 or Under	7.0	8.0 or Higher	5.0 or Under			8.0 or Higher
60 or more	.20	.20	.15	.30	.30	.30	.25
50–59	.25	.25	.20	.30	.30	.30	.25
40–49	.30	.25	.25	.35	.30	.30	.25
30–39	.30	.30	.25	.35	.35	.30	.30
15–29	.40	.40	.35	.50	.50	.45	.40

As in all sample surveys, the numbers reported are estimates within a range of what would have been obtained if all user sites in the survey universe had been surveyed. The margins of sampling variation, or tolerances, for the ratings on overall satisfaction and specific attributes range from .2 to .5. This means that the chances are approximately two in three that a reported rating differs by no more than the indicated tolerance from the rating that would have been obtained if all eligible sites had been surveyed. For example, if a sample of 30 sites gives a software package an overall satisfaction rating of 7.0, the table indicates a tolerance of 0.30. Thus, the chances are two in three that the interval 6.70–7.30 includes the rating that would have been obtained had all eligible sites been surveyed.

METHODOLOGY

The objective of the survey, which was designed by Data Decisions and conducted by Beta Research Corp., Syosset, N.Y., was to collect data on the packages' operating environments and find out how respondents feel about the packages they use and the support they receive from vendors.

The universe for the survey consists of applications packages designated by International Computer Programs, Indianapolis, as having generated $5 million or more in sales; 155 packages marketed by 92 companies were initially identified as having met this qualification.

On July 8, 1983, a registered letter was sent to each of these companies enlisting their cooperation. Each company was asked to supply a list of the 125 most recent customers who had had the package installed and running for at least six months as of July 1, 1983. For those packages with fewer than 125 qualified customers, the company was asked to supply its complete customer file. Companies were also asked to certify that the lists they submitted met these criteria and that they would make no effort to contact customers with regard to the survey. Respondents were also asked whether they were contacted by the vendor.

A minimum of two follow-up phone calls was made to each company in an effort to gain the maximum cooperation and to ensure that each had the opportunity to participate. About half, or 49 companies, responded, providing lists for 79 different application packages, or 51% of the programs originally identified for inclusion in the sample.

Of the user lists submitted, five were for packages that were no longer marketed and one was for a package that also appeared on the ICP list under another name. These packages were removed from the sample. Five more lists with fewer than 29 names, the minimum mailing sample, were also dropped. This left 68 packages with user lists provided by 39 companies.

To expand the number of ratable packages and increase the participation of leading packages as identified by the ICP list, Data Decisions obtained user lists from Computer Intelligence Corp., La Jolla, Calif., for 14 additional packages marketed by six companies. These additional lists brought the total survey universe to 82 packages from 45 companies.

THE MAILING

During the last week of September 1983, 6,265 questionnaires were sent to known users of the 82 packages. Questionnaires were addressed to the vendor's primary contact at each location; the contact was asked to give the questionnaire to someone who used the package if the contact was not personally a user. To encourage a prompt response, a $1 incentive was included in the mailing. A second mailing in mid-October, without an incentive, was made to all nonrespondents.

A total of 3,323 questionnaires was returned; 95 were undeliverable by the postal service. To provide a minimum response rate of 40% and a minimum user base of 15 for each package, telephone interviews were conducted with nonrespondents. The questions asked in the telephone interviews were identical to those included in the mail survey. Fifty-three telephone interviews brought the total number of responses to 3,376, for an overall response rate of 55%. This figure includes 413 respondents who indicated that the package was not currently being used at the installation.

Ratings Values

10-9: Superior
8-6: Very Good
5-3: Acceptable
2-1: Inadequate

Legend

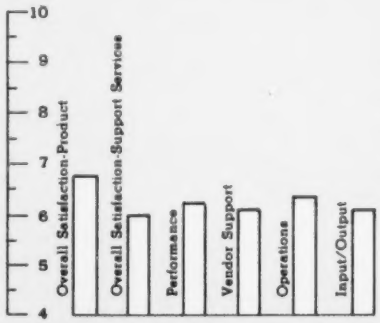
Specific Product Rating
Group Average Rating

GENERAL ACCOUNTING

■ OVERALL SUMMARY

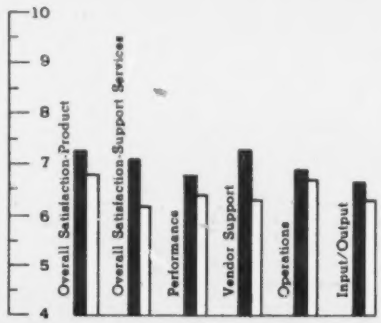
Average—All Packages • 82 packages

2,963 responses • 15% judged package and 11% judged vendor outstanding • 14% actively seeking to replace package, with 2% citing unsatisfactory performance as reason.



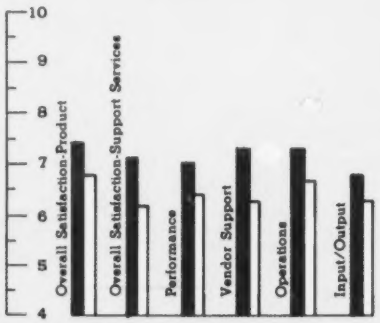
ACCOUNTS PAYABLE—PURCHASING CONTROL • Data Design Associates, 1250 Oakmead Parkway, Suite 310, Sunnyvale, CA 94086 • 408-730-0100

81 responses • 24% judged package and 24% judged vendor outstanding • 12% actively seeking to replace package with 2% citing unsatisfactory performance as reason.



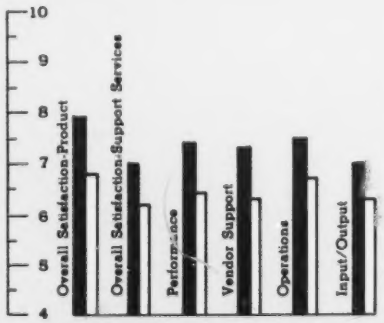
FIXED ASSET ACCOUNTING • Data Design Associates, 1250 Oakmead Parkway, Suite 310, Sunnyvale, CA 94086 • 408-730-0100

53 responses • 36% judged package and 21% judged vendor outstanding • 2% actively seeking to replace package, with 2% citing unsatisfactory performance as reason.



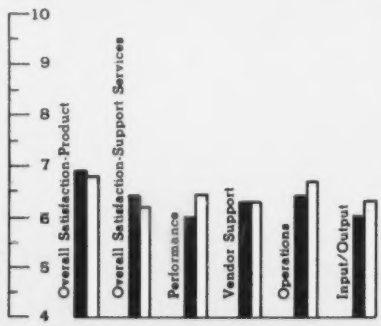
ACCOUNT RECONCILIATION • Disc, Inc., 3837 Maylors Lane, Baltimore, MD 21208 • 301-486-0410

56 responses • 38% judged package and 13% judged vendor outstanding • 4% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



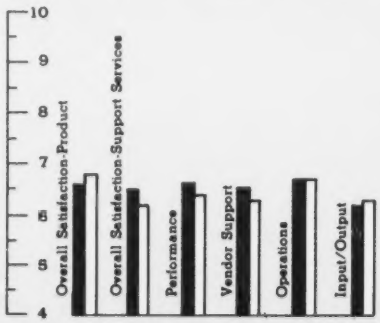
ISA ACCOUNTING & BUDGETING SYSTEM • Information Systems of America, P.O. Box 47975, Atlanta, GA 30362 • 404-441-8800

35 responses • 11% judged package and 9% judged vendor outstanding • 9% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



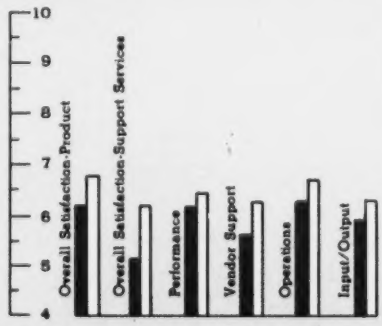
ISA/CASH DISBURSEMENT SYSTEM • Information Systems of America, P.O. Box 47975, Atlanta, GA 30362 • 404-441-8800

47 responses • 11% judged package and 13% judged vendor outstanding • 6% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



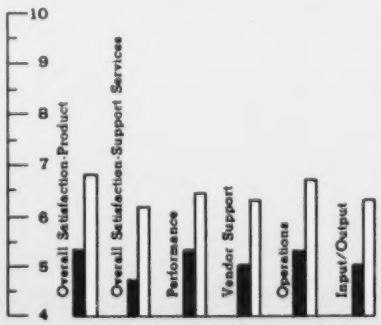
ISA/ACCOUNTS PAYABLE • Information Systems of America, P.O. Box 47975, Atlanta, GA 30362 • 404-441-8800

24 responses • 13% judged package and 0% judged vendor outstanding • 38% actively seeking to replace package, with 13% citing unsatisfactory performance as reason.



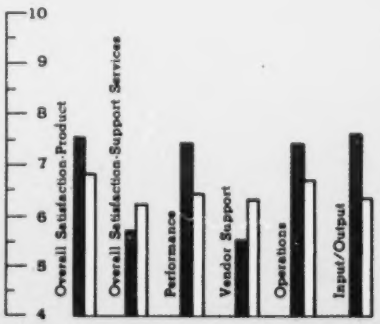
ISA/GENERAL LEDGER • Information Systems of America, P.O. Box 47975, Atlanta, GA 30362 • 404-441-8800

24 responses • 0% judged package and 0% judged vendor outstanding • 50% actively seeking to replace package, with 13% citing unsatisfactory performance as reason.



INSIGHT • Insight Software Systems, One N. Broadway, Suite 901, White Plains, NY 10601 • 914-682-4910

27 responses • 19% judged package and 11% judged vendor outstanding • 0% actively seeking to replace package.



Ratings Values

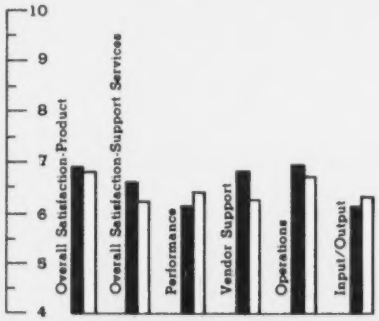
10-9: Superior
8-6: Very Good
5-3: Acceptable
2-1: Inadequate

Legend

Specific Product Rating
Group Average Rating

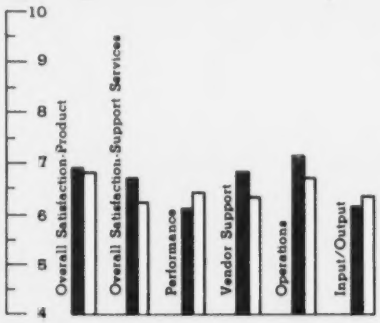
ACCOUNTS PAYABLE • Management Sciences America (MSA), 3445 Peachtree Road, NE, Atlanta, GA 30326 • 404-262-2376

84 responses • 17% judged package and 22% judged vendor outstanding • 13% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



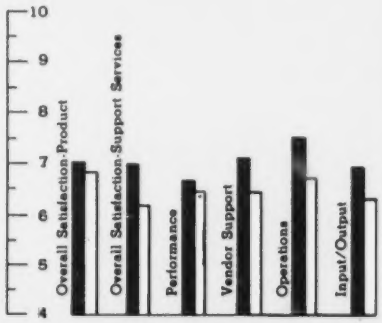
ACCOUNTS RECEIVABLE • Management Sciences America (MSA), 3445 Peachtree Road, NE, Atlanta, GA 30326 • 404-262-2376

88 responses • 11% judged package and 15% judged vendor outstanding • 9% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



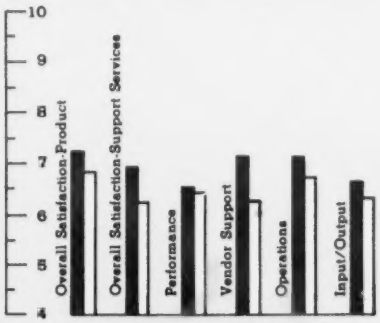
FIXED ASSETS • Management Sciences America (MSA), 3445 Peachtree Road, NE, Atlanta, GA 30326 404-262-2376

82 responses • 14% judged package and 15% judged vendor outstanding • 6% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



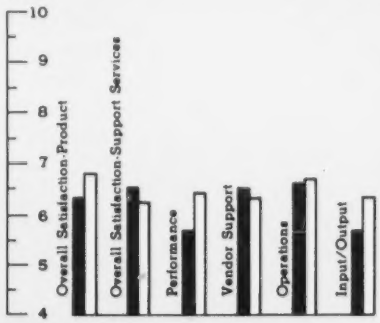
GENERAL LEDGER/FICS • Management Sciences America (MSA), 3445 Peachtree Road, NE, Atlanta, GA 30326 • 404-262-2376

64 responses • 20% judged package and 19% judged vendor outstanding • 3% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



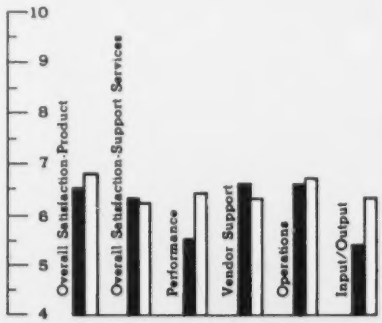
ACCOUNTS PAYABLE PLUS • McCormack & Dodge, 560 Hillside Avenue, Needham Heights, MA 02194 • 617-449-4012

38 responses • 5% judged package and 13% judged vendor outstanding • 5% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



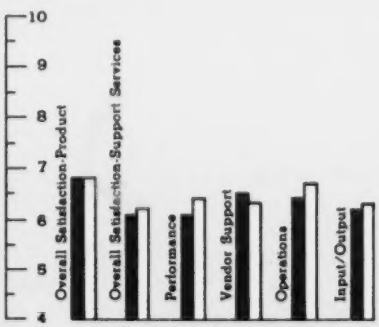
FIXED ASSETS PLUS • McCormack & Dodge, 560 Hillside Avenue, Needham Heights, MA 02194 • 617-449-4012

38 responses • 16% judged package and 11% judged vendor outstanding • 0% actively seeking to replace package.



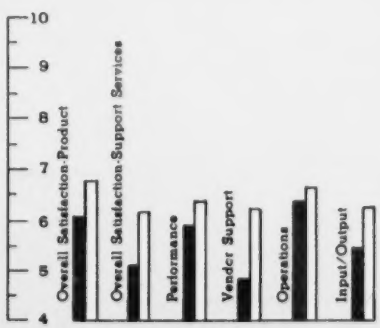
GENERAL LEDGER PLUS • McCormack & Dodge, 560 Hillside Avenue, Needham Heights, MA 02194 • 617-449-4012

84 responses • 19% judged package and 13% judged vendor outstanding • 4% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



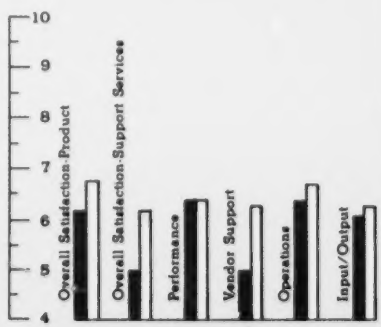
ACCOUNTS PAYABLE • Software International, One Technical Drive, Andover, MA 01810 • 617-685-1400

30 responses • 0% judged package and 0% judged vendor outstanding • 13% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



ACCOUNTS RECEIVABLE • Software International, One Technical Drive, Andover, MA 01810 • 617-685-1400

15 responses • 7% judged package and 7% judged vendor outstanding • 7% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



Ratings Values

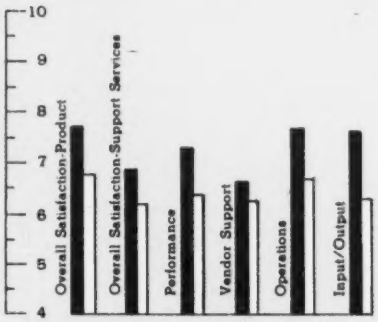
10-9: Superior
8-6: Very Good
5-3: Acceptable
2-1: Inadequate

Legend

Specific Product Rating
Group Average Rating

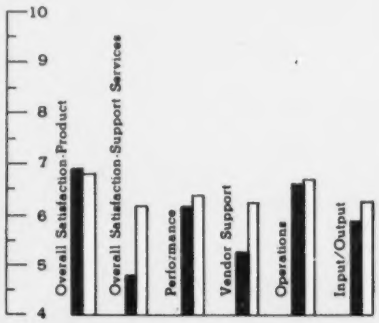
MANAGEMENT ACCOUNTING FOR CONSTRUCTION (MAC) • Timberline Systems, 7180 S.W. Fir Loop, Portland, OR 97223 • 503-643-9461

46 responses • 44% judged package and 20% judged vendor outstanding • 0% actively seeking to replace package.



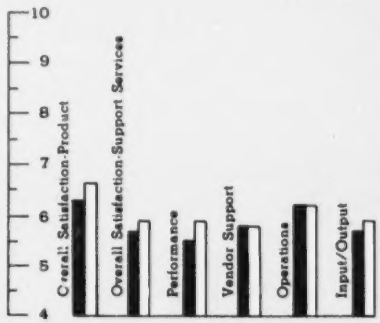
FORTEX CARMS • University Computing Co., UCC Tower, Exchange Park, Dallas, TX 75235 • 214-353-7846

45 responses • 18% judged package and 7% judged vendor outstanding • 7% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



UCC FINANCIAL CONTROL SYSTEM • University Computing Co., UCC Tower, Exchange Park, Dallas, TX 75235 • 214-353-7846

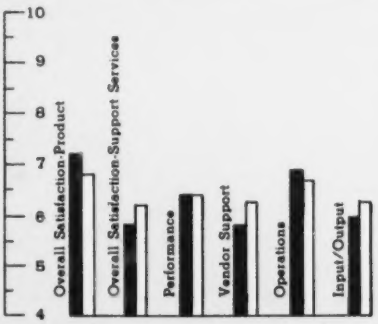
41 responses • 12% judged package and 2% judged vendor outstanding • 7% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



PAYROLL/PERSONNEL

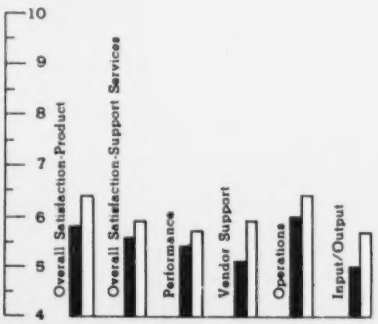
IAI FINANCIAL ACCOUNTING • Westinghouse Information Systems (formerly Information Assoc., Inc.), P.O. Box 30, Iowa City, IA 52244 • 319-354-9200

52 responses • 23% judged package and 4% judged vendor outstanding • 17% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



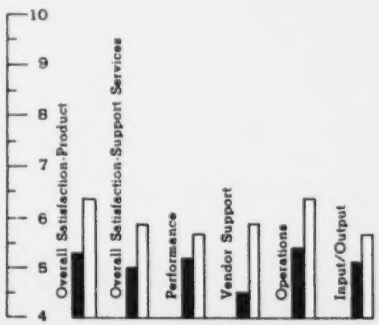
PAYROLL/PERSONNEL • Cyborg Systems, 2 North Riverside Plaza, Suite 2160, Chicago, IL 60606 • 312-454-1865

64 responses • 9% judged package and 8% judged vendor outstanding • 8% actively seeking to replace package, with 5% citing unsatisfactory performance as reason.



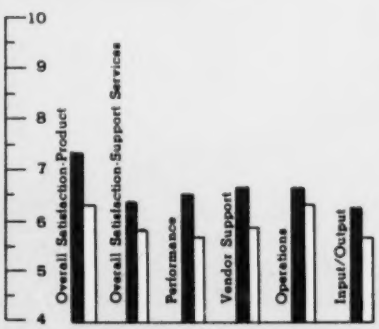
HUMAN RESOURCES SYSTEM • Information Sciences, 95 Chestnut Ridge Road, Montvale, NJ 07645 • 201-391-1600

29 responses • 0% judged package and 0% judged vendor outstanding • 21% actively seeking to replace package, with 4% citing unsatisfactory performance as reason.



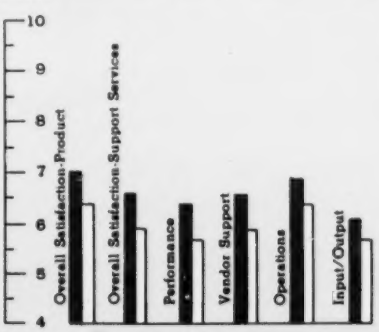
PAYROLL/PERSONNEL • Integral Systems, 165 Lennon Lane, Walnut Creek, CA 94598 • 415-939-3900

48 responses • 18% judged package and 13% judged vendor outstanding • 4% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



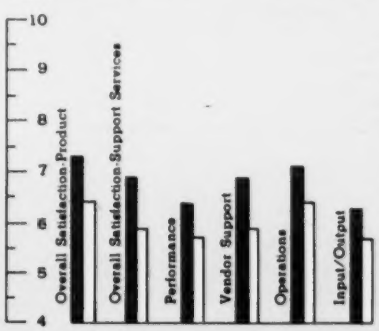
HUMAN RESOURCES SYSTEM • Management Sciences America (MSA), 3445 Peachtree Road, NE, Atlanta, GA 30326 • 404-262 2376

52 responses • 14% judged package and 17% judged vendor outstanding • 4% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



PAYROLL/PERSONNEL • Westinghouse Information Systems (formerly Information Assoc., Inc.), P.O. Box 30, Iowa City, IA 52244 • 319-354-9200

49 responses • 25% judged package and 27% judged vendor outstanding • 4% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



Ratings Values

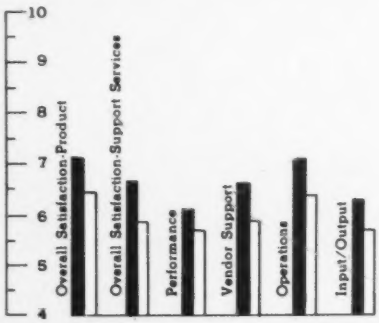
10-9: Superior
8-6: Very Good
5-3: Acceptable
2-1: Inadequate

Legend

Specific Product Rating
Group Average Rating

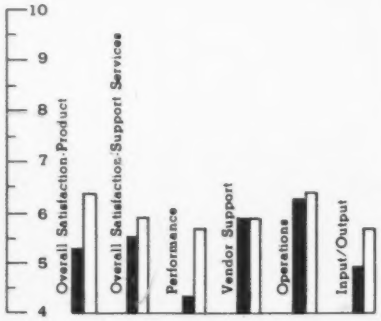
PERSONNEL MANAGEMENT & REPORTING SYSTEM • Management Sciences America (MSA), 3445 Peachtree Road, NE, Atlanta, GA 30326 • 404-262-2376

48 responses • 13% judged package and 15% judged vendor outstanding • 0% actively seeking to replace package.



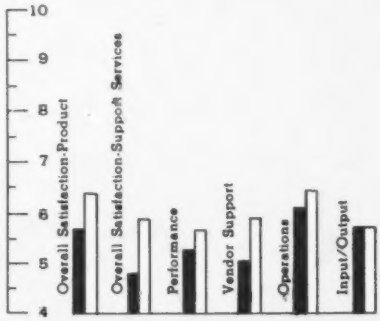
HUMAN RESOURCES PLUS • McCormack & Dodge, 560 Hillside Avenue, Needham Heights, MA 02194 • 617-449-4012

20 responses • 0% judged package and 10% judged vendor outstanding • 10% actively seeking to replace package, with 5% citing unsatisfactory performance as reason.



PAYROLL/PERSONNEL • Westinghouse Information Systems (formerly Information Assoc., Inc.), P.O. Box 30, Iowa City, IA 52244 • 319-354-9200

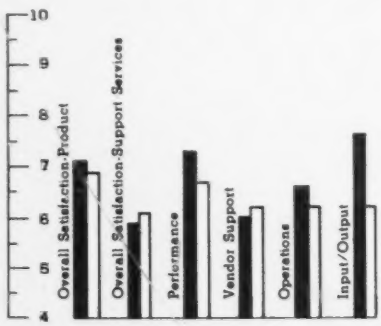
26 responses • 12% judged package and 0% judged vendor outstanding • 23% actively seeking to replace package, with 8% citing unsatisfactory performance as reason.



GENERAL BUSINESS

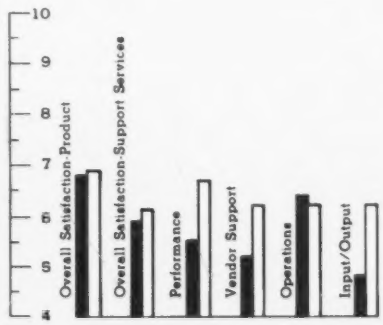
AIMS PLUS • AIMS Plus, Inc., 5000 E. Benwhite, Suite 200, Austin, TX 78741 • 512-385-0702

57 responses • 32% judged package and 14% judged vendor outstanding • 18% actively seeking to replace package, with 2% citing unsatisfactory performance as reason.



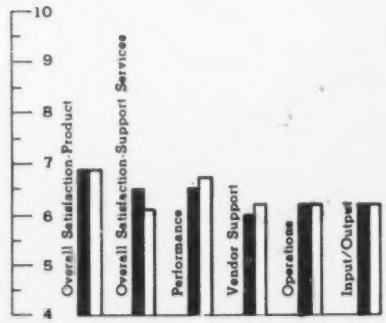
SALES FORECASTING • American Software Co., 443 E. Paces Ferry Road, Atlanta, GA 30305 • 404-261-4381

22 responses • 18% judged package and 9% judged vendor outstanding • 5% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



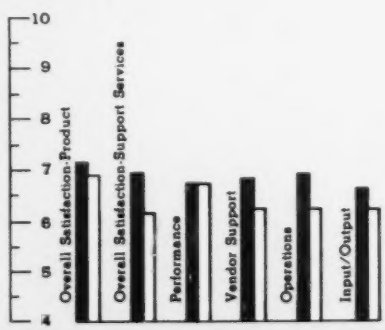
ADR/ETC • Applied Data Research, Inc., Rt. 206 and Orchard Rd., CN-8, Princeton, NJ 08540 • 201-874-9000

15 responses • 27% judged package and 20% judged vendor outstanding • 0% actively seeking to replace package.



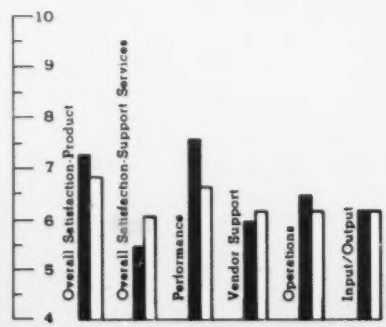
EMPIRE • Applied Data Research, Inc., Rt. 206 and Orchard Rd., CN-8, Princeton, NJ 08540 • 201-874-9000

18 responses • 28% judged package and 28% judged vendor outstanding • 17% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



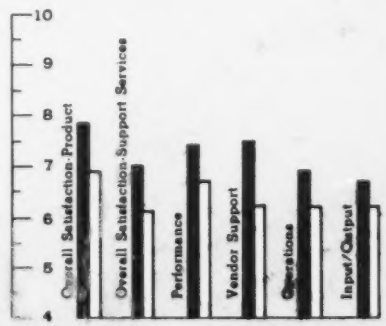
CA-AUTOTAB • Computer Associates International, 125 Jericho Turnpike, Jericho, NY 11753 • 516-333-6700

38 responses • 16% judged package and 0% judged vendor outstanding • 26% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



IFPS • Execucom Corporation, P.O. Box 9758, Austin, TX 78766 • 512-346-4980 • 800-531-5038

70 responses • 30% judged package and 17% judged vendor outstanding • 3% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



Ratings Values

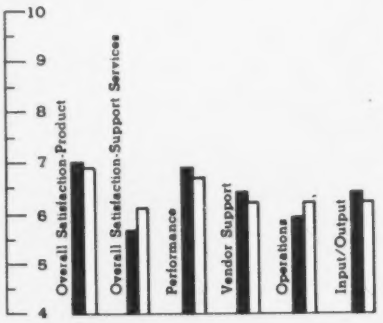
10-9: Superior
8-6: Very Good
5-3: Acceptable
2-1: Inadequate

Legend

Specific Product Rating
Group Average Rating

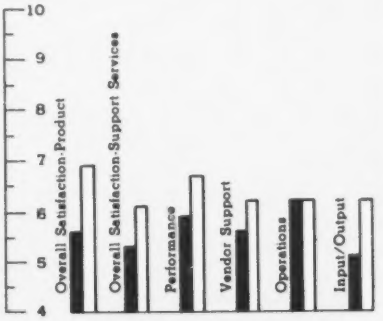
ISA/FORESIGHT • Information Systems of America, P.O. Box 47975, Atlanta, GA 30362 • 404-441-8800

80 responses • 24% judged package and 10% judged vendor outstanding • 24% actively seeking to replace package, with 2% citing unsatisfactory performance as reason.



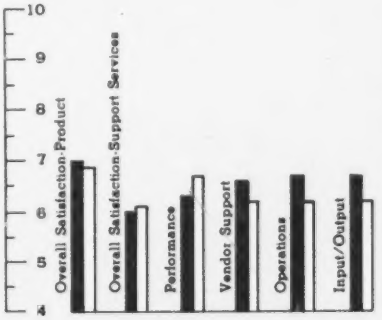
FINANCIAL MANAGEMENT SYSTEM • Interactive Management System, 375 Concord Avenue, Belmont, MA 02178 • 617-489-3550

28 responses • 0% judged package and 11% judged vendor outstanding • 32% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



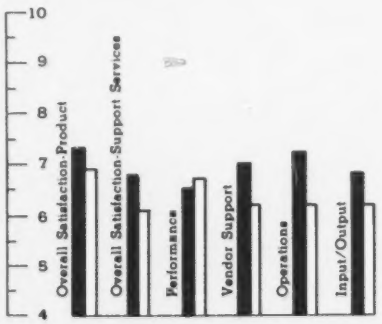
DISSPLA • ISSCO, 10505 Sorrento Valley Blvd., San Diego, CA 92121 • 619-452-0170

57 responses • 14% judged package and 7% judged vendor outstanding • 12% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



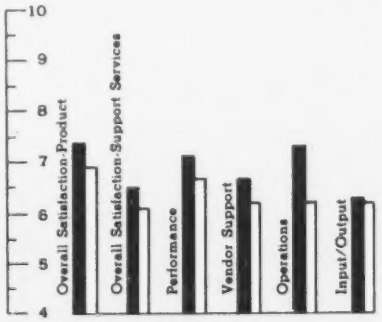
TEL-A-GRAF • ISSCO, 10505 Sorrento Valley Blvd., San Diego, CA 92121 • 619-452-0170

80 responses • 26% judged package and 20% judged vendor outstanding • 8% actively seeking to replace package, with 1% citing unsatisfactory performance as reason.



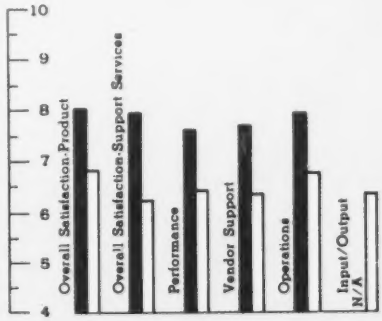
CARRIER ROUTE CODING • List Processing, Inc., 555 Waters Edge, Lombard, IL 60148 • 312-932-7000

52 responses • 17% judged package and 14% judged vendor outstanding • 10% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



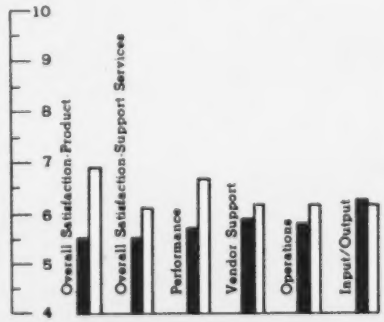
ALLTAX • Management Sciences America (MSA), 3445 Peachtree Road, NE, Atlanta, GA 30326 • 404-262-2376

54 responses • 43% judged package and 37% judged vendor outstanding • 20% actively seeking to replace package, with 2% citing unsatisfactory performance as reason.



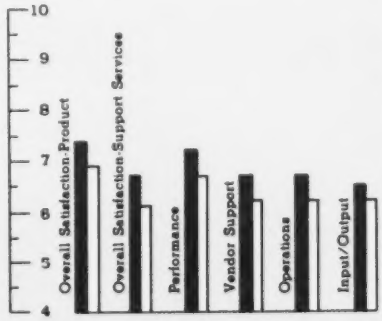
FORECASTING & MODELING SYSTEM • Management Sciences America (MSA), 3445 Peachtree Road, NE, Atlanta, GA 30326 • 404-262-2376

16 responses • 0% judged package and 6% judged vendor outstanding • 0% actively seeking to replace package.



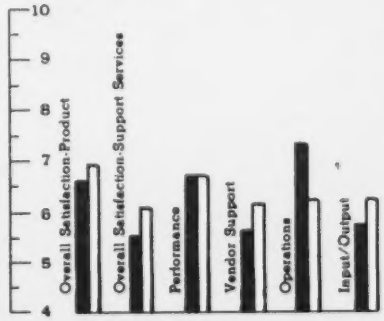
SPSS BATCH SYSTEM • SPSS, Inc., 444 N. Michigan Avenue; Chicago, IL 60611 • 312-329-2400

43 responses • 16% judged package and 9% judged vendor outstanding • 16% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



BUSINESS MANAGEMENT SYSTEM • Xerox Corporation, 5310 Beethoven Street, Los Angeles, CA 90066 • 213-306-4000

27 responses • 15% judged package and 7% judged vendor outstanding • 33% actively seeking to replace package, with 7% citing unsatisfactory performance as reason.



Ratings Values

10-9: Superior
8-6: Very Good
5-3: Acceptable
2-1: Inadequate

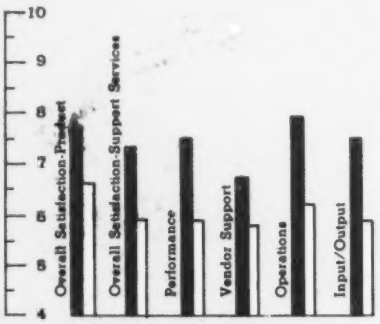
Legend

Specific Product Rating
Group Average Rating

BANKING & FINANCIAL

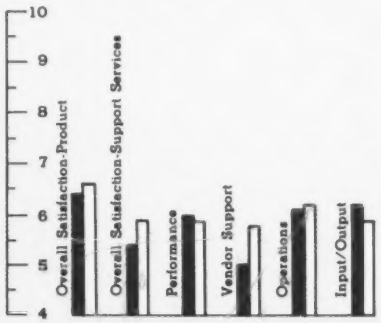
ONLINE BANKING SYSTEM • Bob White Computing, 830 Diane Lane, Naperville, IL 60540 • 312-887-1550

15 responses • 40% judged package and 20% judged vendor outstanding • 13% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



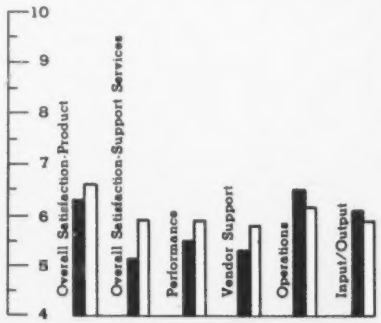
CANTON SYSTEM/1990 • Citizens Automated Systems, 100 Central Plaza South, Canton, OH 44701 • 216-489-3740

18 responses • 17% judged package and 17% judged vendor outstanding • 22% actively seeking to replace package, with 6% citing unsatisfactory performance as reason.



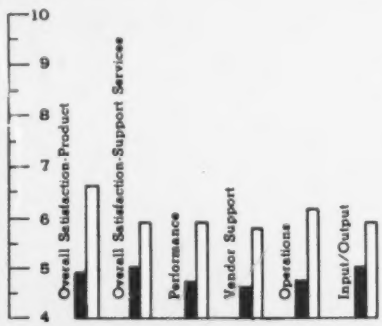
PRO-TRUST • Dyatron Corp., P.O. Box 235, Birmingham, AL 35201 • 205-956-7500

18 responses • 6% judged package and 6% judged vendor outstanding • 33% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



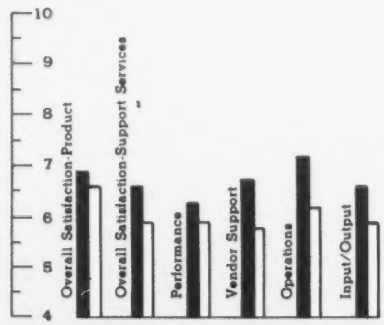
FINANCIAL MANAGEMENT SYSTEM (FMS) • Florida Software Services, P.O. Box 2269, Orlando, FL 32802 • 305-831-3001

15 responses • 0% judged package and 0% judged vendor outstanding • 27% actively seeking to replace package, with 20% citing unsatisfactory performance as reason.



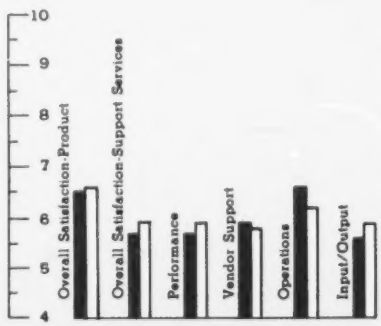
DIRECT DEPOSIT ACCOUNTING (DDA) • Florida Software Services, P.O. Box 2269, Orlando, FL 32802 • 305-831-3001

16 responses • 19% judged package and 13% judged vendor outstanding • 0% actively seeking to replace package.



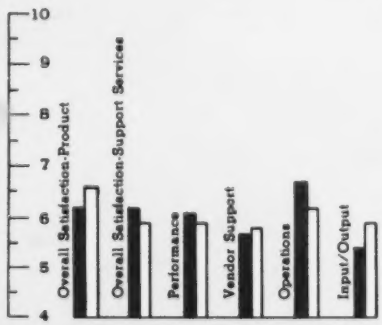
CERTIFICATE OF DEPOSIT (CD) • Florida Software Services, P.O. Box 2269, Orlando, FL 32802 • 305-831-3001

33 responses • 6% judged package and 9% judged vendor outstanding • 12% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



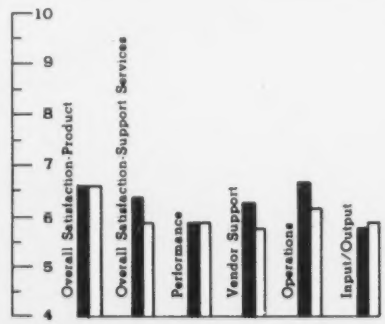
MORTGAGE LOAN SYSTEM • Florida Software Services, P.O. Box 2269, Orlando, FL 32802 • 305-831-3001

27 responses • 4% judged package and 4% judged vendor outstanding • 11% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



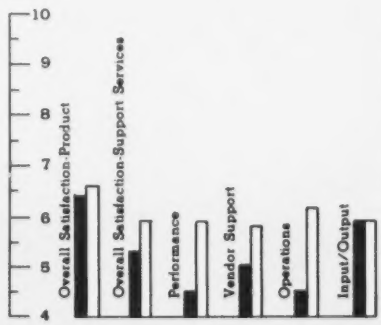
COMMERCIAL LOAN SYSTEM • Florida Software Services, P.O. Box 2269, Orlando, FL 32802 • 305-831-3001

35 responses • 6% judged package and 11% judged vendor outstanding • 9% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



INTEGRATED DEPOSITS SYSTEM • Hogan Systems, 14951 Dallas Parkway, Suite 400, Dallas, TX 75240 • 214-386-0020

16 responses • 0% judged package and 0% judged vendor outstanding • 0% actively seeking to replace package.



Ratings Values

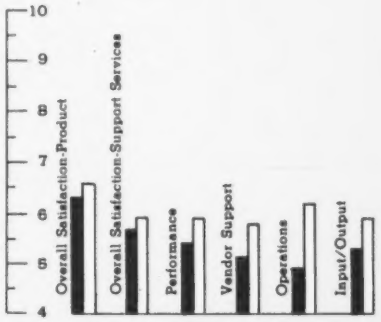
10-9: Superior
8-6: Very Good
5-3: Acceptable
2-1: Inadequate

Legend

Specific Product Rating
Group Average Rating

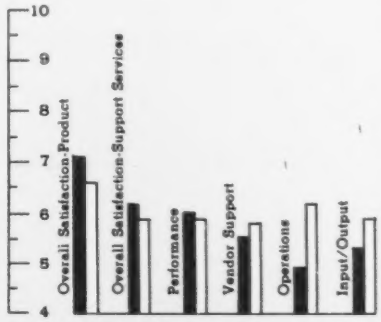
PROPHET • Hogan Systems, 14951 Dallas Parkway, Suite 400, Dallas, TX 75240 • 214-386-0020

18 responses • 7% judged package and 0% judged vendor outstanding • 0% actively seeking to replace package.



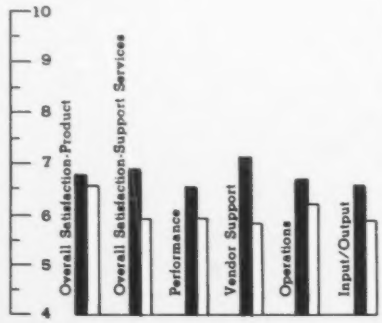
THE UMBRELLA SYSTEM • Hogan Systems, 14951 Dallas Parkway, Suite 400, Dallas, TX 75240 • 214-386-0020

19 responses • 21% judged package and 5% judged vendor outstanding • 0% actively seeking to replace package.



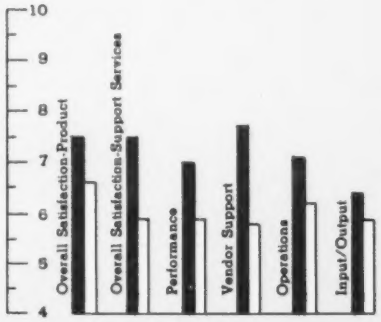
SAVINGS & LOAN SYSTEM • Remote Computing, 1076 E. Meadow Circle, Palo Alto, CA 94303 • 415-494-6111

38 responses • 18% judged package and 21% judged vendor outstanding • 40% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



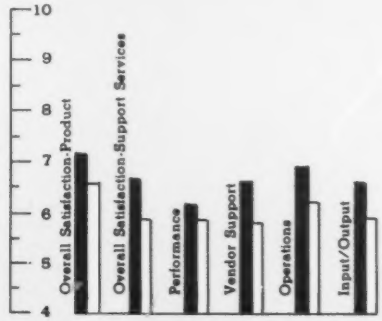
PEP • Stockholder Systems, 1965 N. Park Place, Atlanta, GA 30339 • 404-952-3387

54 responses • 20% judged package and 30% judged vendor outstanding • 11% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



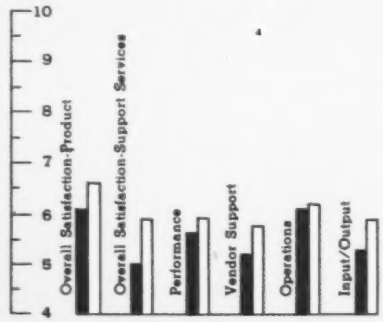
CORPORATE SHAREHOLDER SYSTEM • Stockholder Systems, 1965 N. Park Place, Atlanta, GA 30339 • 404-952-3387

47 responses • 21% judged package and 11% judged vendor outstanding • 23% actively seeking to replace package, with 2% citing unsatisfactory performance as reason.



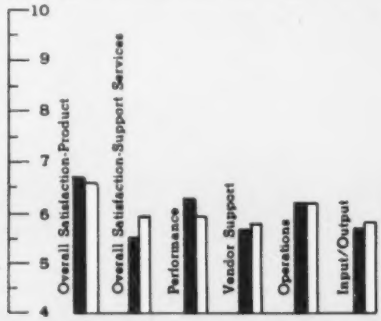
UCC COMMERCIAL LOAN SYSTEM • University Computing Co., UCC Tower, Exchange Park, Dallas, TX 75235 • 214-353-7846

23 responses • 4% judged package and 0% judged vendor outstanding • 26% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



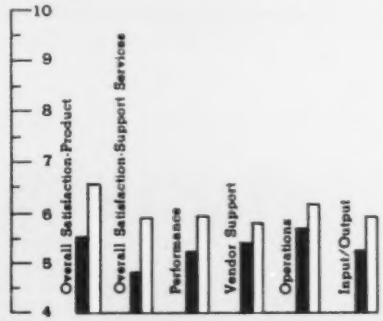
UCC CUSTOMER INFORMATION SYSTEM • University Computing Co., UCC Tower, Exchange Park, Dallas, TX 75235 • 214-353-7846

39 responses • 10% judged package and 3% judged vendor outstanding • 21% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



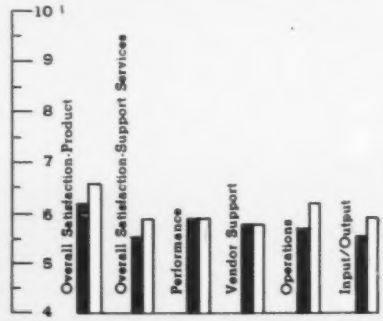
UCC INSTALLMENT LOAN SYSTEM • University Computing Co., UCC Tower, Exchange Park, Dallas, TX 75235 • 214-353-7846

41 responses • 5% judged package and 2% judged vendor outstanding • 27% actively seeking to replace package, with 5% citing unsatisfactory performance as reason.



UCC PAPERLESS ITEM PROCESSING (PIP) • University Computing Co., UCC Tower, Exchange Park, Dallas, TX 75235 • 214-353-7846

53 responses • 11% judged package and 0% judged vendor outstanding • 27% actively seeking to replace package, with 5% citing unsatisfactory performance as reason.



Ratings Values

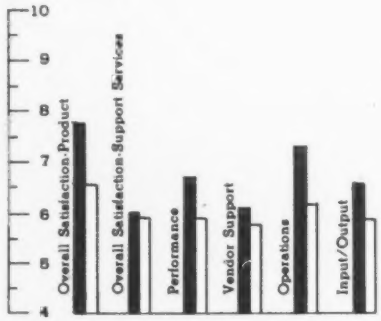
10-9: Superior
8-6: Very Good
5-3: Acceptable
2-1: Inadequate

Legend

Specific Product Rating
Group Average Rating

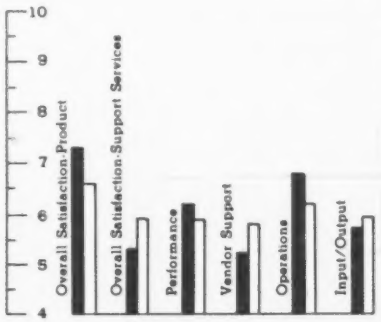
UCC SUPER MICR • University Computing Co., UCC Tower, Exchange Park, Dallas, TX 75235 • 214-353-7846

46 responses • 30% judged package and 13% judged vendor outstanding • 17% actively seeking to replace package, with 4% citing unsatisfactory performance as reason.



DEMAND DEPOSIT/CREDIT RESERVE • Weiland Software Group, 240 Fencl Lane, Hillside, IL 60162 • 312-449-2033

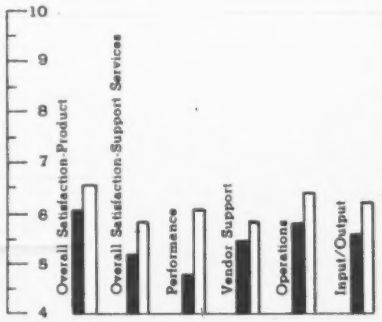
17 responses • 12% judged package and 0% judged vendor outstanding • 47% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



INSURANCE

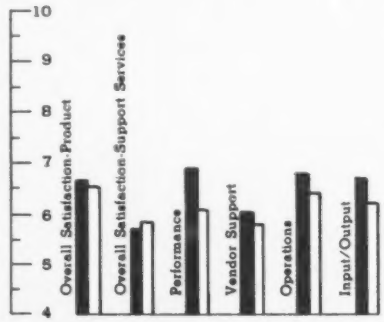
LIFE-COMM • Informatics General Corp., 21031 Ventura Blvd., Suite 800, Woodland Hills, CA 91364 • 213-887-9040

38 responses • 0% judged package and 0% judged vendor outstanding • 13% actively seeking to replace package, with 5% citing unsatisfactory performance as reason.



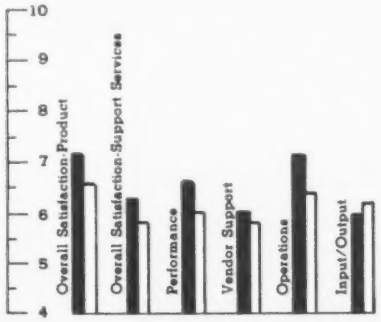
INSURENET • Insurenet, Inc., 1900 Powell Street, Emeryville, CA 94608 • 415-652-3771

33 responses • 15% judged package and 9% judged vendor outstanding • 27% actively seeking to replace package, with 3% citing unsatisfactory performance as reason.



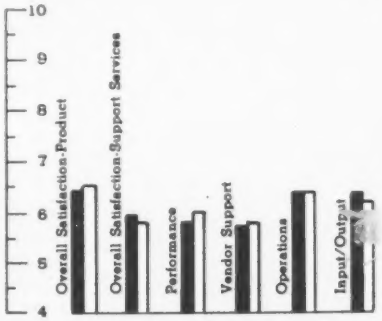
CREDIT LIFE ADMINISTRATION • Logic, Inc., 2720 Stemmens Freeway, 1100 Stemmens Tower South, Dallas TX 75207 • 214-630-6131

15 responses • 27% judged package and 13% judged vendor outstanding • 13% actively seeking to replace package, with 0% citing unsetisfactory performance as reason.



PALLM SYSTEM • PALLM, Inc., 2606 Fortune Circle, East Drive, Indianapolis, IN 46241 • 317-243-7591

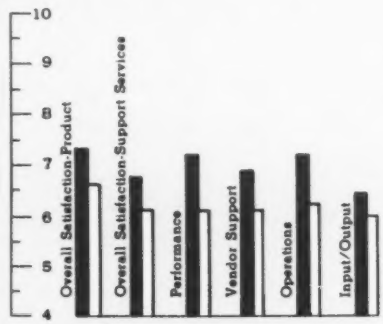
44 responses • 9% judged package and 16% judged vendor outstanding • 16% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



MANUFACTURING

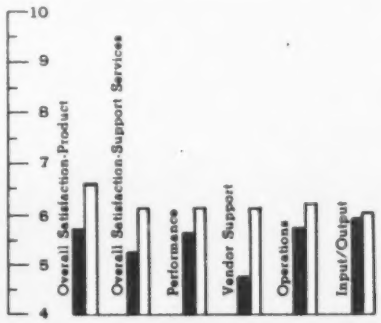
MANMAN • Ask Computer Systems, 730 Distel Drive, Los Altos, CA 94022 • 415-969-4442

66 responses • 26% judged package and 14% judged vendor outstanding • 9% actively seeking to replace package, with 2% citing unsatisfactory performance as reason.



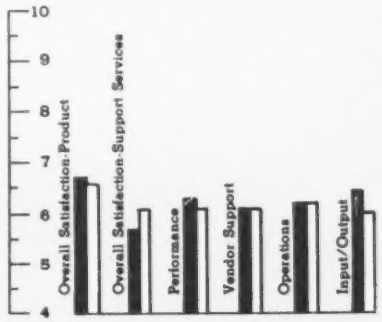
MINI-MIZ/PAIS • Automated Quill, Inc., 3501 S. Corona, Top Floor, Englewood, CO 80110 • 303-761-2722

18 responses • 6% judged package and 6% judged vendor outstanding • 22% actively seeking to replace package, with 11% citing unsatisfactory performance as reason.



MRPS • Cincom Systems, Inc., 2300 Montana Avenue, Cincinnati, OH 45211 • 513-662-2300

16 responses • 13% judged package and 0% judged vendor outstanding • 19% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



Ratings Values

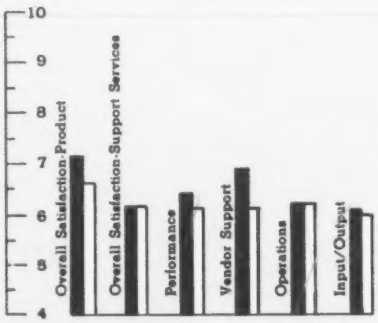
10-9: Superior
8-6: Very Good
5-3: Acceptable
2-1: Inadequate

Legend

Specific Product Rating
Group Average Rating

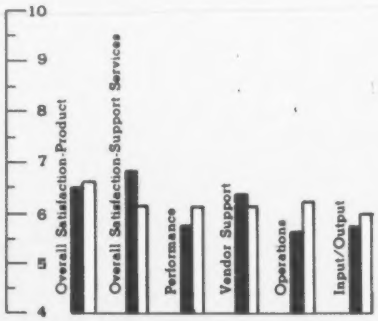
AMAPS • Comserv, 3400 Comserv Drive, Eagan, MN 55122 • 612-681-7000

47 responses • 21% judged package and 13% judged vendor outstanding • 9% actively seeking to replace package, with 4% citing unsatisfactory performance as reason.



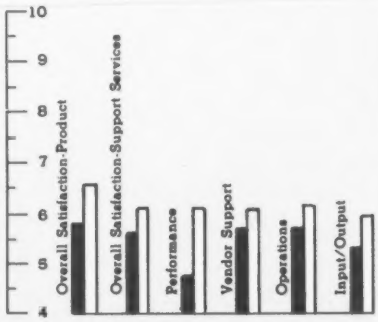
ARISTA MANUFACTURING SYSTEM • Management Sciences America (MSA), 3445 Peachtree Road, NE, Atlanta, GA 30326 • 404-262-2376

17 responses • 6% judged package and 12% judged vendor outstanding • 6% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



MAS MANUFACTURING CONTROL SYSTEM • Martin-Marietta Data Systems, 6303 Ivy Lane, Greenbelt, MD 20770 • 301-982-6500

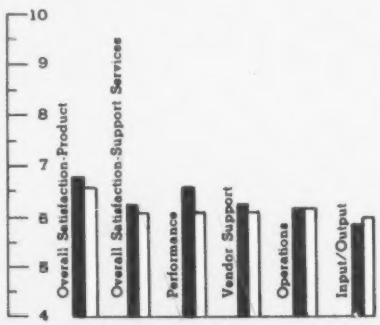
22 responses • 0% judged package and 5% judged vendor outstanding • 5% actively seeking to replace package, with 5% citing unsatisfactory performance as reason.



PROJECT MANAGEMENT

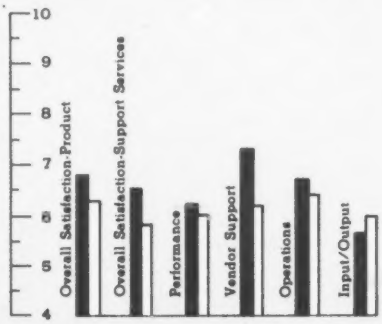
MAXCIM • NCA Corporation, 388 Oakmead Parkway, Sunnyvale, CA 94086 • 408-245-7990

41 responses • 15% judged package and 10% judged vendor outstanding • 22% actively seeking to replace package, with 3% citing unsatisfactory performance as reason.



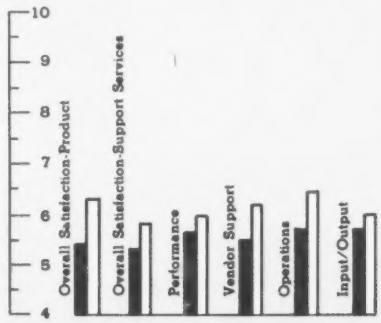
PAC SYSTEMS • AGS Management Systems, 320 Walnut Street, Philadelphia, PA 19106 • 215-922-7500

31 responses • 16% judged package and 16% judged vendor outstanding • 16% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



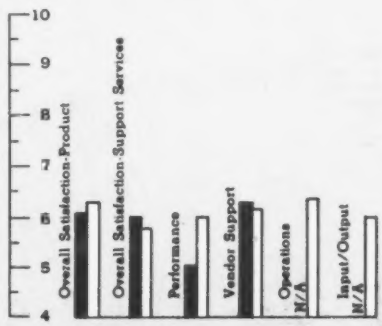
PROJECT CONTROL/70 • AGS Management Systems, 320 Walnut Street, Philadelphia, PA 19106 • 215-922-7500

17 responses • 0% judged package and 12% judged vendor outstanding • 6% actively seeking to replace package, with 6% citing unsatisfactory performance as reason.



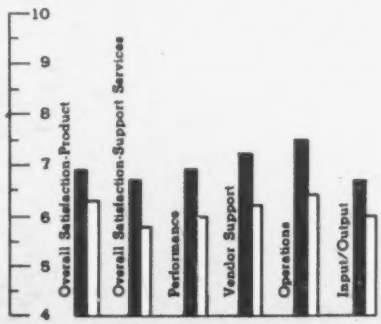
SDM/70 • AGS Management Systems, 320 Walnut Street, Philadelphia, PA 19106 • 215-922-7500

16 responses • 13% judged package and 6% judged vendor outstanding • 6% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



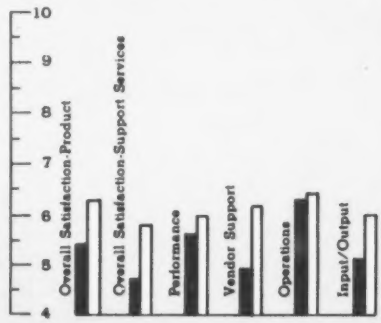
EXECUTIVE/INFORMATION SERVICES (EIS) • Boeing Computer Services, 7980 Gallows Court, Vienna, VA 22180 • 213-417-5010

17 responses • 18% judged package and 24% judged vendor outstanding • 65% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



INVENTORY & PURCHASING SYSTEM • Management Sciences America (MSA), 3445 Peachtree Road, NE, Atlanta, GA 30326 • 404-262-2376

31 responses • 3% judged package and 10% judged vendor outstanding • 19% actively seeking to replace package, with 0% citing unsatisfactory performance as reason.



European companies are continuing to concentrate on the professional user.

THE SOFTWARE/ SERVICES SCENE

by John Lamb

At the end of last year Philips president Wisse Dekker lambasted the European software/services industry, claiming it suffered from a lack of creativity, poor production techniques, and distribution problems. All these ills have accumulated over time—too short a time, according to Dekker. "The computer as a medium has changed so quickly that the software industry has hardly had time to stabilize."

But stabilize it must, if it wants to score sales in the expanding markets of the future. "The software market of the future will be a consumer market," predicts Dekker. Companies that want to make it in that market, he explains, will have to be creative and not resort to the makeshift solutions they've used up until now.

Most European service companies are not looking that far into the future. Indeed, they generally seem content to concentrate on the broader professional computer market, leaving the smaller $1 billion microcomputer market to the newcomers. That traditional European market for computer services is valued at roughly $8 billion.

Defining that European market is another story. "Strictly speaking, there is no such thing as the European services industry," explains Doug Eyeions, director general of the European Computing Services Association (ECSA). "There's an Italian industry, a French industry, and so on with quite distinct differences between them," he notes.

FIG. 1

TOP 20 COMPUTER SERVICES COMPANIES IN WESTERN EUROPE

	COMPANY	COUNTRY OF MAJORITY SHAREHOLDING	OWNED BY	SERVICES RCS	SERVICES BATCH	SERVICES SP	SERVICES SS	EMPLOYEES	TOTAL 1982 REV.* ($ million)
1	**IBM RCS**[1]	U.S.	public corporation	X	X			N/A	180.0
2	**Scicon Group**	U.K.	BP	X	X	X	X	3,500	175.4
3	**SG2 Group**	France	Société Générale/private	X	X	X	X	4,290	165.4
4	**CISI**	France	CEA (government/BNP)	X	X		X	2,700	162.7
5	**Cap Gemini Sogeti**	France	independent			X	X	4,000	155.7
6	**Geisco**	U.S.	General Electric	X		X	X	1,200	150.0
7	**Finsiel Group**	Italy	IRI/Banca d'Italia				X	2,320	139.3
8	**GSI**	France	CGE	X	X	X	X	2,350	138.2
9	**Datev**	West Germany	Tax Advisors Cooperative	X	X		X	1,830	101.2
10	**Sema Metra International**[2]	France	Paribas		X	X	X	1,400	88.6
11	**CCMC**	France	public accountants/staff/ Société Générale	X	X			1,180	81.0
12	**Control Data**	U.S.	public corporation	X	X	X	X	1,100	74.4
13	**Thomson Informatique**[3]	France	Thomson-CSF			X	X	1,750	74.1
14	**Datema**	Sweden	Johnsson Group	X	X		X	1,100	73.8
15	**Telesystemes**	France	PTT	X	X		X	1,590	73.6
16	**Sligos Group**	France	Credit Lyonnais/Tymshare	X	X	X	X	1,690	68.3
17	**CIG**	Belgium	Société Générale	X	X	X	X	1,040	66.3
18	**Kommunedata**	Denmark	local government	X	X		X	1,470	65.5
19	**SESA**	France	CGE/Cap Gemini Sogeti/ staff			X	X	680	59.6
20	**ICL Consultancy and Training**	U.K.	ICL			X	X	1,110	59.3

*Revenue derived from Europe
1. Includes revenue only from remote and batch services.
2. Includes revenue only from computing services.
3. Includes TITN, Syseca, and Answare.
Source: Quantum Science MAPTEK Europe.

RCS: Remote Computing Services
SP: Software Products
SS: Software Services

FIG. 2

COMPUTING SERVICES INDUSTRY IN WESTERN EUROPE

	COMPUTING SERVICES USER EXPENDITURE[1] 1982 ($ millions)	FORECAST % GROWTH RATE 1982-83 ECSA[2] MEMBERS	QSC[3]	INFLATION[4] 1982-1983	GROSS DOMESTIC PRODUCT[5] 1982 ($ billions)	COMPUTING SERVICES AS % OF GDP
Austria	126	N/A	7.5	4.5	67	0.19
Belgium	294	15.7	12.7	7.5	85	0.35
Denmark	311	13.6	10.6	6.3	55	0.56
Finland	243	24.1	12.0	9.5	48	0.50
France	1,690	23.9	13.5	9.3	537	0.32
Germany	1,220	10.7	9.7	3.5	655	0.19
Ireland	60	20.5	15.0*	12.5	18	0.34
Italy	818	16.6	13.5	16.3	348	0.24
Netherlands	579	11.6	12.4	4.6	138	0.42
Norway	261	12.1	9.3	10.0	56	0.46
Portugal	21	†	16.0*	20.8	23	0.09
Spain	233	18.4	15.7	13.0	180	0.13
Sweden	386	18.0	8.0	9.8	99	0.39
Switzerland	405	11.7	8.1	4.3	96	0.42
U.K.	1,490	15.9	14.5	5.8	472	0.32
Total W. Europe	8,140	—	12.2	9.0	2,880	0.28
U.S.	13,800	—	14.3	6.0	3,160	0.44

[1-3] Quantum Science MAPTEK Europe and MAPTEK USA
[2] ECSA members' estimates are calculated in local currency values and are from unweighted survey sample.
[3] QSC forecasts are from Quantum Science databases and are weighted.
[4] GDP deflator, OECD data
[5] OECD and national statistical organizations
† Small sample
* Estimated

ECSA's 1983 survey of the industry reflects these national differences. The West Germans, for example, tend to be strong in software products, which overshadow batch and remote bureau services. Harry Hoyle, a senior vice president at Quantum Science, which conducted the survey, points out that the traditionally high PTT rates depress the bureau business in West Germany. In France, where the establishment of advanced networks has received top priority from the PTT, the reverse is true. Meanwhile, in Norway, all services companies sell hardware, while in the U.K., only 55% of the services firms offer complete systems.

There are also ownership differences between countries. Some firms in countries such as Germany and Scandinavia are controlled by government agencies or special interest groups. The German Datev organization, for example, is run by a professional group of tax advisors. Meanwhile, in France and the U.K., commercial owners are more common.

"The European market is very disparate. There are gaps in each country," comments Roger Graham, ECSA's newly appointed vice president. "I hope we'll see much more cooperation between countries. We are already beginning to see that happening through the EEC's Espirit program and its pressure on governments to harmonize telecommunications, but there is still a lot to be done."

Financially, things are looking up for European services companies. In 1982 spending on computer services spurted 14%, with software products up 19% and software services (consultancy, turnkey systems, and systems implementation) up 17%. Some of this increased spending benefited Scicon, the U.K. company that is second in revenues only to IBM in the services sector. "In most areas 1983 has been better for us," says Warren Werblow, Scicon's managing director. "Our growth rate was maintained by acquisitions [Scicon owns SES in Germany and GFI in France], but growth is limited by how long you are prepared to wait before making a profit."

PACKAGED SOFTWARE BOOM

ECSA predicts that the industry will grow 11% per year over the next three years, reaching $13.8 billion by 1987. ECSA's Eyeions foresees a "massive increase" in the packaged software business, particularly for personal computers and networked applications. "All the old boundaries are falling," he says, "and the structure of the business is changing fast."

Companies offering these newer services will outdistance today's bureau operators within the next three years, according to the ECSA survey. The trade group estimates that European users spent $3.89 billion on batch and remote services and $3.88 billion on software products and services in 1982. By 1987 software products and services revenues should be well ahead of bureau services revenues, if ECSA's forecasts prove correct. Specifically, ECSA is predicting an annual 17% increase for software products and a 16% boost for software services.

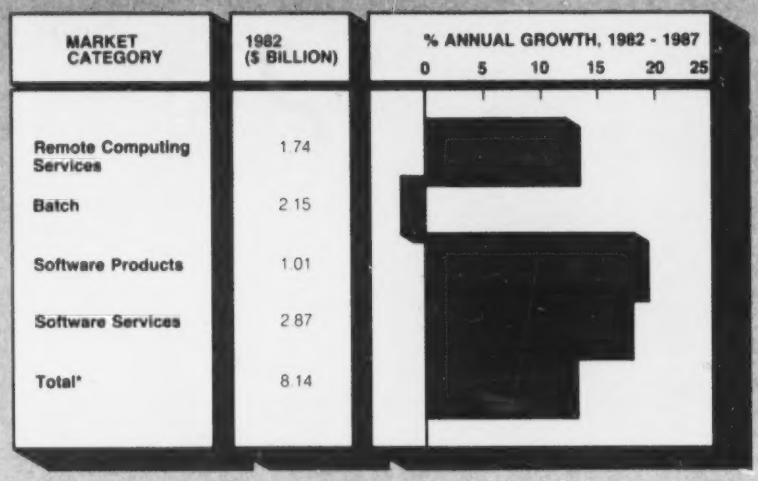
Such healthy growth was stunted during the recession, which hit the services companies harder than their hardware counterparts. "The services industry tends to link price to inflation," explains Quantum Science's Hoyle. "Hardware suppliers have not been affected in that way and have been free to respond to competition by price-cutting. But now that inflation has come down, the service element in computing is also coming down."

Hardware companies have also been attempting to muscle in on the expertise of independent software companies. Control Data, for example, snapped up U.K. banking specialist Arbat and took a $12 million stake in Digital Equipment oemer Systime. Not to be outdone, the U.K. electronics and leisure combine, Thorn EMI, acquired Altergo Software, as well as Software Sciences and Datasolve.

"Hardware suppliers will increasingly turn to the services industry either through acquisition or third-party agreements," predicts Hoyle. "There is a blurring between the hardware and software industries. Already over half of all European software companies sell equipment, and they are coming up

FIG. 3

USER EXPENDITURES ON COMPUTING SERVICES IN WESTERN EUROPE



*Includes other computing services valued at $370 million
Source: Quantum Science MAPTEK Europe.

against stiff competition, particularly in the small business area, from firms such as Kienzle and Nixdorf. They must adopt vertical market strategies."

Although ESCA says that the most successful companies are those that find an industry niche, it warns that progress will still be slow because of the strong national character of European services companies. This is confirmed by Michael Hunt, an executive vice president at Management Science America's MSA International subsidiary. A company specializing in general accounting software, MSA recently bought a manufacturing industry package. "It's been a long, hard grind," admits Hunt. "Packaged software is not always easy to design for a particular market."

At Hoskyns, which is owned by the U.S.-based Martin Marietta conglomerate, executive director Neville Cerfontyne is more sanguine. "Europe is full of multinational companies that will want to centralize their purchasing so that they can set up standard computer systems. Dealing with a multinational opens up that door to overseas sales," he declares. "In addition, we don't always work from a U.K. base. We use distributors that do the conversion, produce documentation in the local language, and so on." Some 20% of Hoskyns' revenue comes from export sales.

"The trouble with vertical markets is that they saturate very quickly," says Quantum Science's Hoyle. "Companies have got to get distribution and product strategies that take them outside their immediate location—strategies that get them away from small- and medium-sized companies and into the departments of larger companies."

In France, the services companies have seized on that exact point. Exports, which account for one quarter of all services sales, total approximately $1.5 billion. "Our overseas activities now form an integral part of our general strategy," reports Pierre Dellis, chief administrator of Syntec, the country's software/services trade association. Dellis predicts that software will account for 90% of the value of computer systems by the end of the decade.

Dellis believes the French government should recognize the significance of the software industry. But more than recognition, the industry needs support. For one thing, Dellis wants the government to include software in its export insurance scheme. At present only projects involving equipment that is 90% French-made qualify for this insurance.

France, which pulled in $1.69 billion in end-user sales in 1982, is the largest services market in Europe. In general, computer services is a very volatile business in Europe. "The way the software industry is built up means it is prone to fragmentation," explains Hoskyns' Cerfontyne. "You don't need much money to start up and every time a larger company goes bust, which is frequent, ex-employees get together and start up new companies." This hydra effect means that the smaller firms can undercut their bigger rivals, which, according to Cerfontyne, "puts an undue strain" on large companies. "You can't price-cut on people," he comments.

The overall services industry in Europe is very immature, claims ECSA's Eyeions. "Nobody has even 5% of the market and expansion is held back by the different languages, currencies, and legal systems. Even a very basic application like payroll is very hard to take across frontiers."

Despite the difficulties, most services firms are bullish about the future. "We haven't even begun to scratch the surface of the software package market," declares MSA's Hunt. "There is a tremendous replacement market selling on-line packages to firms that have homegrown systems in place."

Some of those homegrown systems are indeed ripe for replacement. That certainly is the case in Austria, where 60% of the local users have software that's over eight years old. Those statistics come from Diebold's Austrian subsidiary, which also estimates that 20% of the companies in the country are using programs that are over 13 years old.

The pickings in Austria look good enough to prompt a move westward by Hungarian services companies. The country in fact is test marketing bureau services in Austria and has already concluded deals with such companies as ICL to sell software products elsewhere in Europe.

Other marketing opportunities are also opening up around Europe. Hoskyns' Cerfontyne believes that services companies, offering a more creative range of products, will be moving into many new application areas. What's happening today, however, is a different story. The ECSA survey, in fact, highlights the current trend toward networked support services that provide such things as remote maintenance, downloaded software, and electronic mail. More important, these net services furnish distribution channels for such consumer services as banking. "The recent $10 million contract awarded to ADP in the U.S. to support International Harvester's dealers with a range of business services is indicative of the market trend," ECSA points out.

Quantum Science believes that services companies could provide networked services to computer dealers. Such services would enable dealers to select and try out software. They would also offer documentation and help facilities, supply software, and give computer aided instruction. But before these services can be furnished, "international data communications networks will have to be much easier to use," explains ECSA's Eyeions. "Before new services like these are introduced, it should be possible to access international networks without the intervention of the PTTs."

The software/services sector should also be able to take advantage of the micro movement. Hoskyns' Cerfontyne believes that less than 5% of the market for low-end business systems has been tapped so far. One company doing big business at that low end is MSA. The firm's Peachtree personal software subsidiary is currently pulling in between $5 million and $6 million in business from European microcomputer owners. (Despite these gains MSA's 1983 foreign revenues were low-

Do you know the only place
where you can find...

...all the major developments
in office and data technology ?
Ways to improve communication and
efficiency in office organization ?
The latest in word and data processing ?
A comprehensive display
of microcomputers
and personal computers ? All you need
to know about information science –
from office computers
to complete systems ?
You don't ?

Answer:

World Centre for Office and Data
Technology

CeBIT

Further information from:
Hanover Fairs Information Center
Salem Industrial Park
Route 22 East, Whitehouse NJ 08888
Tel.: (201) 534-9044, (800) 526-5978 (toll free) · Telex: 833493

... at the Fair of Fairs

Wednesday, 4th – Wednesday, 11th April

Hannover
Messe'84

ICW

CIRCLE 214 ON READER CARD

er than expected, especially in Scandinavia.)

The new breed of nonprofessional computer user is in fact already having an impact on the services industry. Two major issues for ESCA members—data protection and copyright—are both a result of wider computer usage. On the data protection front, ECSA wants to see legislation throughout Europe so that national discrepancies can't be used as another trade barrier. Copyright is a thornier issue.

"Some of us would like to see users prosecuted for copying programs," declares ECSA's Eyeions. "It's really like people being found in possession of drugs. At the moment we are tackling the pushers when perhaps we ought to be looking beyond them to the users." ECSA is pushing for national legislation that would grant explicit copyright protection for programs. The group does not favor central registers of copyright programs, because it feels that would allow unscrupulous operators to produce look-alike programs that do not violate the letter of the law.

Meanwhile, software/services firms hoping to reap the benefits of a broader marketplace should remember that change will dictate demand. "The point is that business is dynamic," says Hoskyns' Cerfontyne. "What matters in business in the future may not matter now." Philips' Dekker also picked up on this point, declaring, "I suspect that in the immediate future it is not the strictly technological developments, but rather the developments in business organizations that will be the most important."

DATAMATION

March 1984 Vol. 13 No. 3

Editor	Linda Runyan
European Managing Editor	Paul Tate
Technology Editor	Fred Lamond
Contributing Editors	James Etheridge Peter Hidas Norman Kemp John Lamb
Editorial Advisors	Philip Dorn David Hebditch Louis Naugès Angeline Pantages Malcolm Peltu Russell Pipe
Copy Editor	Florence Lazar
Art Director	Kenneth Surabian
Assistant Art Director	Susan M. Rasco
Production Manager	Geof McDonald

EDITORIAL OFFICES: 130 Jermyn St., London SW1 4UJ, England, (441) 839-3916; telex 914911. 13 Stanley Place, Budd Lake, NJ 07828, USA, (201) 691-0592; telex 4494308.
CIRCULATION: J.B. Tratsart Ltd., 154 A Greenford Rd., Harrow, Middlesex, HA 13QT, England.